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UNITED STATES PATENT AND TRADEMARK OFFICE

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09/396,873	09/15/1999	BRUCE DICKSON	5577-175	8033

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UNITED STATES PATENT AND TRADEMARK OFFICE

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Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/396,873
Filing Date: September 15, 1999
Appellant(s): DICKSON ET AL.

Julie H. Richardson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/21/2006 appealing from the Office action

mailed 11/02/2005

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings

which will directly affect or be directly affected by or have a bearing on the Board's

decision in the pending appeal.

(3) Status of Claims

The statement of the status of the claims in the appeal brief is substantially correct with

the exception that:

Claims 7, 16, 19, 20, 21, 32, and 35 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they

have been withdrawn by the examiner. Rejections regarding Lipman US 5,075,606 and

Wiklof US 6,232,994 have been withdrawn by the examiner Claims 7, 16, 19, 20, 21, 32,

and 35 are now objected to.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5828034	**CHANG**	**1-1997**
4052720	**MCGREGOR**	**3-1976**
4727655	**JACOBI JR.**	**2-1987**
5611608	**CLAUSEN**	**10-1994**

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 2-6, 9-12, 23, 24, 26-28, 30-32, are rejected under 35 U.S.C. 102(e) as being

anticipated by Chang US 5,828,034.

Claims 2 and 23 state " a data entry device, and means for establishing the external
temperature of the data entry device to reduce temperature differentials.... To reduce the
detectability of a thermal signature by eavesdropping"

Although the applicant's intent for his heating element may differ from Chang's intent
for his heating element, the applicant does not claim eavesdropping or a feedback control
based on detectability of thermal imprints. The preferred embodiment simply provides
resistive heating of a keyboard or other input device, as the means for masking (Instant
specification, Page 9, lines 11-25). Chang US 5,828,034 describes the same physical
structure with the same function (controlled heating) so it anticipates this limitation.

Chang teaches a data entry device (keyboard, Col 1 lines 55-57). Chang teaches warming
the keyboard and hands, (Col 1 lines 57-64). Warming the keyboard from room
temperature reduces temperature differentials, thereby masking thermal signatures as a
result of data entry by a user of the data entry device. This reduces the detectability of
the signature by eavesdropping.

Claims 3 and 24 state "data entry device is a keyboard"
Chang teaches a data entry keyboard, (Col 3 line 17).

Claims 4 states "data entry device has external surfaces that are thermally conductive"
 Chang teaches the data entry device surface is thermally conductive (joystick), (Col 5
lines 7-10).

Claim 5 states "data entry device is thermally resistive"

Chang teaches a data entry device has external surfaces that are thermally resistive, (plastic), (Col 3 line 18).

Claims 6 states, "maintaining the external temperature in a range surrounding a predetermined set point"

Chang teaches controlling the temperature in a range surrounding a predetermined set point by monitoring the temperature and controlling the heating element to provide said temperature around said set point (Col 6 lines 9-21).

Claim 9 states "controlling step comprises the step of controlling the external temperature using conduction"

Chang teaches using conduction to maintain the external temperature of the data entry device, (Col 5 lines 6-12).

Claims 10, and 30 state "controlling the external temperature utilizing convection"

Chang teaches controlling the temperature using convection, (fan), (Col 3 line 55).

Chang teaches using convection to maintain the external temperature of the data entry device, (Col 3 line 60 to Col 4 line 13).

Claims 11, and 31 state "controlling the external temperature utilizing convection comprises blowing a stream of temperature controlled air in proximity to the data entry device"

Chang discloses controlling the temperature by blowing a stream of temperature controlled air near the data entry device, (fan), (Col 3 lines 55-60).

Claims 12 and 28, state, "controlling step comprises the step of controlling the external temperature utilizing radiation"

Applicant argues that Chang is not teaching heating via radiation. Examiner disagrees, Chang teaches controlling the temperature through radiation for the data entry device, (Col 1 line 60, Col 3 line 32, and Col 5 lines 24-27).

Claim 26 states "a resistive heating source operably associated with the data entry device so as to maintain the external temperature in a range surrounding a predetermined setpoint"

Chang teaches the heat source may be a resistive heating element, (Col 5 lines 58-65).

Claim 27 states, "the resistive heat source comprises a heating element formed as part of the data entry device"

Chang teaches the step of controlling the external temperature using a resistive heating element as part of the data entry device, (Col 3 line 27, Col 5 lines 55-60).

Claim 32 states "masking comprises a feedback control circuit which provides a closed

loop feedback control of the temperature wherein the feedback control circuit comprises:

a temperature sensor operably associated with the temperature sensor and with the means

for controlling the temperature so as to control the means for establishing the external

temperature of the data entry device, and

A control circuit associated with the temperature sensor and with means for controlling

temperature so as to control the means for establishing the external temperatures of the

data entry device based on the sensed temperature"

The rejection of claim 32 is withdrawn.

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang US

5,828,034

As per claim 8, Chang discloses picking components that are not sensitive to heat

because the range of temperatures may climb up to (120F), (Col 3 line 46). It would have

been obvious to pick a temperature in the a range for user comfort, (Col 1 line 47).

Chang teaches a device that allows the user to set the temperature (Col 6 lines 5-10).

Any temperature picked for comfort would be closer to human body temperature (35C-

40C) than room temperature, and mask the thermal signature left by a user on a data entry

device.

Claims 6, 13, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chang US 5,828,034 in view of Jacobi Jr. US 4,727,655.

As per claim 6, 13, and 29 Chang discloses heating the data entry device. Chang does not

disclose using an infrared heat lamp.

Jacobi discloses an infrared heat lamp for heating, (Col 1 line 55, Col 5 line 3).

It would have been obvious to one skilled in the art to replace Chang's heating element,
with Jacobi's heat lamp, because the lamp is economical and efficient, (Col 2 line 39).

Claims 15, 17, 22, and 34, 36, 37 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Mcgregor US 4,052,720 in view of Clausen US 5,611,608.

As per claims 15, 17, 22, 34, 36, and 37, Mcgregor teaches producing random masking

noise, (Col 3 lines 20-25). Mcgregor teaches masking with pre-recorded sounds (Music),

(Col 3 lines 50-60). Mcgregor teaches adapting the amplitude and frequency of the noise

to best adapt the masking, (Col 4 lines 17-31). Mcgregor teaches the system is designed

for use in a room, and in an office (Col 4 lines 3 lines 15-20, Col 6 line 65 to Col 7 line

6).

Mcgregor does not teach a computer in an office.

Clausen teaches an office desk designed for use with computers, (Fig 11, 15, 16) It is

well known that offices have computers, and computers have data entry devices. It would

have been obvious to one of ordinary skill in the art to modify the system of Mcgregor in

an office with the computer desk and computers of Clausen to maximize productivity and

ergonomic value, (Col 2 lines 61-66).

(10) Response to Argument

I. Chang teaches reducing thermal signature

Although the applicant's intent for his heating element may differ from Chang's intent

for his heating element, the applicant does not claim eavesdropping or a feedback control

based on monitoring of the users thermal imprints. The preferred embodiment simply

provides resistive heating of a keyboard or other input device, as the means for masking

(Instant specification, Page 9, lines 11-25). Chang US 5,828,034 describes the same

physical structure with the same function (controlled heating) so it anticipates this

limitation. It is irrelevant that the structure of Chang does not state reducing the

detectability of a thermal signature by eavesdropping. This element is inherently carried

out in the invention.

II. Temperature range of Chang

As per claim 8, Chang discloses picking components that are not sensitive to heat

because the range of temperatures may climb up to (120F), (Col 3 line 46). It would have

been obvious to pick a temperature in the a range for user comfort, (Col 1 line 47).

Chang teaches a device that allows the user to set the temperature (Col 6 lines 5-10).

Any temperature picked for comfort would be closer to human body temperature (35C-

40C) than room temperature, and mask the thermal signature left by a user on a data entry

device.

III. Monitoring the external temperature of the data entry device

As per the applicant's arguments in regards to claims 7, and 32 the rejections regarding

those claims have been withdrawn, and the claims are objected to based on their rejected

base claims.

IV. Rejections in view of Lipman US 5,075,606 withdrawn

As per the applicant's arguments against the rejections in view of Lipman, these

rejections have been withdrawn.

V. Motivation of Mcgregor in view of Clausen

The applicant's intent is to use music and interfering sound patterns to mask auditory data

entry sounds. The preferred embodiment provides interfering sound patterns and music

as the means for masking. Mcgregor US 4,052,720 describes a sound control system

with the same function as the applicant's invention, but lacks explicitly teaching a data

entry device. Clausen US 5,611,608, teaches computers in office space. The

combination anticipates the limitations of the instant specification. The examiner asserts

that the sound is "operably associated" with the data entry device. Read with the

broadest reasonable interpretation, the sound of Mcgregor operates in conjunction with

the data entry device, to reduce noise, and thus is operably associated.

The applicant alleges that if the noise in the office was sufficient to mask data entry the

noise would not be ergonomic or efficient. The examiner argues that the volume of the

masking sounds is not a question of motivation. The motivation is that it would be

beneficial to have computers in offices. Mcgregor alone teaches masking sounds, and

allegations from the applicant of Mcgregors sounds being to loud is not a fact. Clausen is

relied upon to show the benefit of having computers, which have data entry devices, in

offices.

VI Rejections in view of Wiklof US 6,232,994 withdrawn

As per the applicant's arguments against the rejections in view of Wiklof, these rejections

have been withdrawn.

VII Chang in view of Jacobi

Chang discloses heating the data entry device. Chang teaches heating which inherently

maskes data entry. Chang teaches radiant heating but does not teach the radiant method

of using an infrared heat lamp.

Jacobi discloses an infrared heat lamp for heating, (Col 1 line 55, Col 5 line 3).

It would have been obvious to one skilled in the art to replace Chang's heating element, with Jacobi's heat lamp, because the lamp is economical and efficient, (Col 2 line 39).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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